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ABSTRACT

The impact of federal legislation upon educational research and evaluation is explored in detail within a political systems framework. Specific laws have affected the financial support, organization, and function of research and development services. These laws include: the Cooperative Research Act (1954); the Elementary and Secondary Education Act (1965) which authorized the Educational Research and Development Centers and the Regional Educational Laboratories; and the Education Amendment of 1972 which created the National Institute of Education. The influence of federal legislation on individual rights has also been considerable; specifically the Civil Rights Act (1964); the Freedom of Information Act (1966); the National Research Act (1974); and the Family Educational Rights and Privacy Act (1974). The following implications should be recognized before the full notion of impact can be understood. (1) The relationship between federal legislation and educational research is essentially political, application of the political systems theory is appropriate. (2) A public relations campaign is needed to offset misconceptions about educational research. (3) Federal impact is considerable and partly uncontrollable. (4) The entire field needs a balanced, continuous, and integrated federal legislative approach which recognizes the dangers of polarization between researchers and practitioners, and between researchers and subjects. (CP)

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THE IMPACT OF FEDERAL LEGISLATION UPON EDUCATIONAL RESEARCH AND EVALUATION: AN OVERVIEW

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THE IMPACT OF FEDERAL LEGISLATION UPON EDUCATIONAL RESEARCH AND EVALUATION: AN OVERVIEW

Introduction

For several years now, especially after the 1960s era of increased federal spending, national leaders have focused on the issue of impact. For example, at the 1973 annual meeting of the Council for Educational Development and Research, Congressman John Brademas stated:

> Many Members of Congress are not really clear about what research in education is and, whatever it is, are not sure that research makes any difference in improving teaching and learning. (Brademas, 1974, p. 12)

U. S. Senator Clarborne Pell echoed these sentiments when he challenged the same group at its next annual meeting by saying:

> In the minds of Congress there dwells the question: does education research and development have any real impact on schools? Have all these new developments made any difference at all? (Pell, 1975. p. 12)

Many influential policy makers are asking similar questions. No matter what political motivations might lie behind such questions of impact, it is clearly evident that the questions themselves are important enough to warrant being answered.

The purpose of this paper is to address the topic of impact, though not as many politicians do. Since federal legislation provides funding for such a large portion of the educational research conducted in this country, it seems logical to assume that the question of the impact of educational research is closely tied to a related question, namely, the impact that federal legislation has upon educational research. In other words, it is not enough to question impact upon educational practice without a clear idea of one very important context of that impact: the

influence federal legislation has on educational research. After all, if federal laws were somehow adversely affecting the quality and quantity of educational research, it would hardly be fair to condemn educational research's inability to effect improvement in a school. Thus this paper is concerned with a more basic question of impact; one which, if answered, could shed considerable light upon the ultimate issue of impact on educational practice.

The paper attempts to accomplish this purpose in four stages. First, some key concepts are explored in terms of political systems theory. Then, major federal enactments influencing educational R,D, and E are described. Third, some specific impacts of those enactments are identified. And finally, some conclusions and implications are drawn. Throughout, emphasis is placed upon the major issues involved in the relationship between federal legislation and educational R,D, and E.

Conceptualization of Terms

One problem with investigating the "impact" of "federal legislation" upon "educational research and evaluation" is the difficulty of defining the basic concepts. For example, the seemingly simple notion of "federal legislation" is actually somewhat elusive. There might be agreement about what words make up a law but, as Hawley observed,

> to know what a policy looks like when it is passed by a legislature...is not to know what that policy looks like to its putative beneficiaries. A policy approved is not a policy implemented. (Hawley, 1977, p. 322)

Similarly, the other concepts in the title of this paper are open to interpretation and need some level of explication.

The basic framework for conceptualizing in this paper is a political systems one. Generally, as discussed by Easton (1953), the essence of political action can be described in terms of a policy making process,

wherein certain inputs are converted by a political system into outputs. Segments of the environment might then respond to the outputs and provide feedback to the system often in the form of new inputs. Depicted in a linear fashion, the policy-making process can be shown most simply by diagram. (See Figure 1 attached.)

Federal Legislation

In terms of the policy-making process, "federal legislation" can be defined generally as the output of the federal legislative political system. Yet, this is rather an oversimplification, as will become obvious from a more detailed explanation of the legislative process.

As Garms et al. (1976, pp. 161-172) detailed, federal education policy is formulated in four major steps. First comes the generation process, whereby a popular idea is translated into a draft of a bill by Congress, an interest group, or most usually the executive branch. At the second stage, the enactment process, the bill is introduced into Congress, shaped by a committee, voted on first by the committee and then by the full chamber, perhaps submitted to a joint committee, and finally sent to the President for final action. Third, funds are authorized and then appropriated for the new law. And finally the legislation is implemented through administrative regulations developed for the law and through the actions of staff assigned to administer the law.

Throughout these stages of the enactment of a piece of legislation, three points are particularly relevant to the purpose of this paper. First, as some have remarked,

> The committee...is the single most important entity in the process of policy formation. (Miller and Matthews, 1977, p. 17)

The Congressional committee that acts upon a bill is quite powerful in dictating what finally is enacted, including how the act is later to be

administered. This power is reflected in the fact that committee actions are often used by courts to measure legislative intent behind particular laws. Also, Congressional committees sometimes take it upon themselves to oversee enacted programs (Miller and Matthews, 1977, p. 17). In short, the full meaning of any legislation must be derived to some extent from the intentions of the Committee spawning it and perhaps even overseeing it.

Another significant aspect of the legislative process is the way in which any law is implemented. Anyone who has ever received a grant can attest to the importance of the administrative regulations interpreting the statute authorizing the grant program and the actions of the specific program administrators. Since statutory language very often is vague, the specificity of this implementation stage largely comes from administrative decision making.

Yet, no matter what the law actually states and how it is implemented, if it involves funding, then the appropriation phase of the legislative process is extremely significant. Whereas a statute might authorize a given limit of funding, still an actual dollar amount must be appropriated in the budget for any given year. Hence, the Congressional appropriations committees can greatly affect the final status of an act, as can the President with his executive powers in relation to the budget.

To return to the political systems model described above, it becomes readily apparent, therefore, that it is not enough merely to identify the written law with the system's "output." In some way, committee influence, administrative implementation, and appropriations outputs must also be considered. In this paper, the term "federal legislation" is basically defined as the output of the legislative system, i.e., the written law,

but the other three elements are also considered to be inextricably tied in with this output. Thus, all four dimensions of legislation need to be discussed when assessing legislative impact (see Figure 2 attached).

Impact

When "impact" is defined in Webster's Third International Dictionary, it is described as "the dynamic force impressing or compelling change." It is a forceful word and connotes a "collision" between an existing reality and a new force that somehow changes that reality. If the new force is a federal law, a political system output, then the impact is the immediate effect that law has on its specific population when that law collides with existing values, practices, etc. Some kind of change occurs.

But "impact" alone does not tell the entire story. Political scientists sometimes use the notion of "outcome" to describe in system terms the consequences of the change that occurs when an output has an impact. Thus, for instance, a given policy can result in a change in the distribution of some resource or service (impact), and this change can have certain consequences in the quality of life of the people affected, by the policy (outcome). To carry the systems model even further, the people affected, when they realize the change and its consequences, then react (respond) to the policy and provide feedback for the political system, perhaps in the form of new inputs to be converted.

In this paper "impact" will be used broadly to indicate: the core meaning of "impact," the wider notion of "outcome," and the idea of "response," to the extent that these can be logically considered "results" of a given legislative policy. Thus, for example, a given legislative act might mandate a specific level of funding (output) that leads to a

cutback in service (impact), triggering a realignment of priorities making life more uncomfortable for a given population (outcome), with the end result of increased political activity among that population (response). The use of the word "impact" in the title of this paper is intended to encompass the entire chain of events after output.

Figure 3 (attached) depicts the full range of federal legislation and impact in political systems form. "Impact," as used in this paper, broadly refers to three stages in the linear depiction (8, 9, and 10). "Federal legislation" is defined by the steps associated with output and implementation (3, 4, 5, 6, and 7). Such broad definitions are needed in order to avoid any narrow oversimplification that might equate the words of a statute with federal policy, and the level of spending by a service with the full impact of that policy.

Education Research and Evaluation

As will be pointed out later in the paper, one of the enduring issues throughout the history of federal support for educational research and evaluation revolves around the desired functions of federally-supported research and evaluation. Whereas some might want funded basic research, others demand emphasis upon development or dissemination. Thus, the kind of impact federal legislation has upon educational research and evaluation to some extent depends upon what is meant by "research and evaluation."

In their article on data bases regarding educational R & D, Mason and Nelson (1977, p. 13) developed a broad composite model for defining the research functions of educational R & D. The definition embraced a wide range of activities: knowledge production (including basic research and statistical accounting), problem solution (including applied research,

evaluation, demonstration. and development), and knowledge utilization (including dissemination). At the same time, the same authors considered these activities relevant to "education" insofar as they are associated with formal schools systems (see pp. 13-14). In this paper, the notion of educational research and development (Ed. R & D for brevity) encompasses all of these concepts.

Moreover, also included in the term Ed R & D is the notion of educational research and development as a community, a profession, a science, and an art. In this way, a very broad concept of Ed R & D is the topic of this paper: actual research, development, evaluation, demonstration, dissemination activities, as well as training programs, R & D institutions and agencies, and the art at local, state, and national levels. In short, Ed R & D as used here is a very broad notion, comprising a number of functions at various levels in a variety of settings.

In conclusion, this section was intended to accomplish three purposes: one, to define terms; two, to convey a sense of the complexity of the topic; and three, to introduce some pertinent issues in the context of a political systems framework for analysis. The next step is to describe the particular pieces of federal legislation that could be said to have some kind of impact on Ed R & D.

Federal Legislation Influencing Ed R & D

In the history of federal legislative relationships with Ed R & D, one can identify two gross categories of laws: ones that directly address Ed R & D and others that pertain only indirectly. In the first category might be placed pieces of legislation that have provided funding for different kinds of Ed R & D activities, that have mandated the collection of certain kinds of data, or that have organized federal R & D activities

in certain ways. The second category might be made up of legislation primarily aimed at protecting the rights of individuals but having a degree of fall-out affecting Ed R & D. A review of some of the major laws in each category indicates how federal legislative involvement in Ed R & D has changed over the years.

As might be expected, the first legislation concerned with educational research activities was rather limited in scope. In 1867, Congress passed the Department of Education Act, by which a Department of Education (later to be the United States Office of Education) was created. Its charge (as far as Ed R & D is concerned) was meager by today's standards, but was certainly in keeping with the status of Ed R & D in those days: to collect facts and statistics about education (statistical accounting function) and to dif[illegible]e information about schools' organizational management and teaching methods (rudimentary dissemination function). For the next several decades, the Office of Education kept its R & D activities well within the boundaries of its legislative definition. As Clark observed, the U.S.O.E.'s relatively narrow interpretation of this legislative mandate left the federal government and its offices as virtual "bystanders" while the field of Ed R & D went through its early stages of development (Clark, 1976, p. 5).

It was not until the 1950s that legislation moved the federal government into a somewhat more active stance. In 1954, Congress passed the Cooperative Research Act, authorizing the U. S. Commissioner of Education to enter into cooperative arrangements with universities, colleges, and state agencies for the purposes of conducting educational research, surveys, and demonstrations (P.L. 83-531). Modeled afer the relatively successful experiences of the National Institutes of Health,

the National Science Foundation, and the Office of Naval Research, the Cooperative Research Program emphasized support of productive scholars in a competitive manner. Since an unsolicited grants approach was used, choice of research problems was left to the individual researcher, and proposals were judged by panels of peers. It should be added that proposals were submitted from numerous scholars in disciplines other than education and that for several years after the first funding of this act the numbers of non-education scholars submitting proposals grew yearly (Sieber, 1974, p. 481).

In retrospect, the Cooperative Research Act was a true break-through in federal involvement in the field of Ed R & D. After this act, funds flowed a little more easily into the field. And, in addition, this law signaled a growing confidence in the ability of R & D to provide answers to questions plaguing American school systems.

The break-through symbolized by the passage of P.L. 83-531 was reinforced by other legislation of the 1950s. In 1954, the National Advisory Committee on Education Act was signed into law. Through it, a National Advisory Commission on Education was established to recommend needed studies in education and to propose action based on the studies. And in 1958, Titles VI and VII of the National Defense Act empowered the Commissioner of Education to conduct research for the improvement of foreign language instruction, to develop specialized materials for such instruction, to conduct research regarding audio-visual aids and educational media, and to disseminate information about new technologies. Although the N.D.E.A. was mostly concerned about matters other than just educational research, still its provisions regarding Ed R & D, in the context of greater federal attention to education generally and increasing

appropriations for the Cooperative Research Program, made quite clear that Congress was prepared to support a problem-solving strategy that included Ed R & D. This is especially evident when consideration is given to the use made of some of the appropriations granted to the National Institute of Mental Health, the National Science Foundation, and even to the military. For in the 1950s each of these was also engaged to some degree in R & D related to education: research related to mental health in schools, improvement of science instruction in schools, and learning-related research. The 1950s thus closed with increased federal involvement in Ed R & D, though hardly in a comprehensive or coordinated fashion.

In the fifties, growing Congressional support for Ed R & D was indicated; in the sixties, that support was realized. In 1963, one section of the Vocational Education Act authorized 10% of all future appropriations for vocational education to be set aside for research and development. Though limited to the area of vocational education, such an earmark of funds was at least an initial stage in defining Ed R & D's relationship to the entire field of education. This relationship became further defined by passage of the next major piece of legislation.

The Elementary and Secondary Education Act of 1965 expressed legislative willingness to support Ed R & D. As Dershimer (1976, pp. 66-7) pointed out, shapers of this legislation believed that educational research would make a difference in improving schools. For this reason, Title IV broadened the U.S.O.E.'s authority under the Cooperative Research Act. Grant and contract provisions were authorized, and private research organizations were allowed to participate. Funds were authorized for the training of researchers and the construction of lab facilities. In

addition, Title V sought to strengthen the research and planning capabilities of state education agencies, as well as their personnel. And finally, in an amendment whose significance would grow for both education as a whole and Ed R & D, states were directed to develop provisions for evaluating program effectiveness in meeting the needs of culturally-deprived children, especially through objective measurements of educational achievement. Overall, considerable optimism about educational research was expressed in the provisions of ESEA.

Two programs given impetus by ESEA exemplify how short-lived that optimism was. The regional educational laboratories began with a flurry of activity and were almost immediately embroiled in controversy. As Clark observed in his depiction of whirl-wind atmosphere of developing a score of labs in a matter of months, "the existence of these new organizations was threatened before a majority of them became fully operational" (1976, p. 4). And the Research and Development Centers, though never as seriously attacked as were the labs, still ran into some criticism. By the end of the sixties and early seventies, both programs were being severely reduced, and even threatened with extinction.

At least some of the unexpectedly swift disillusionment toward the labs and centers in particular and Ed R & D in general can be traced to a criticism of the agency responsible for administering much of the Ed R & D legislation. The U. S. Office of Education at that time was being criticized by politicians, researchers, and practicing educators. Charges of inflexibility, mismanagement, inadequate staffing, and even incompetence were leveled. Perhaps Dershimer explained it best when he stated that in the field of educational research there was a breakdown of the "bureaucratic-professional complex," that is, the bureaucrats in U.S.O.E.

were not working in close relationship with the professional research community (1976, p. 31). Whatever the reason, U.S.O.E.'s handling of Ed R & D was viewed by some as quite inadequate. By the early 1970s unhappiness with U.S.O.E.'s performance, as well as numerous other political forces (Wise, 1976, p. 64), led to pressures in favor of a separate agency to administer Ed R & D.

The National Institute of Education was created by the Educational Amendments of 1972 (P. L. 92-318), Title III. As described in the government policy statement, the NIE's purpose was fourfold. First, it was intended to help solve the problems of education. Second, it was meant to advance education not only as a profession and an art, but also as a science. The third aim of the new agency was to strengthen education's scientific and technological bases. And fourth, NIE was directed to build an effective R & D system. It is noteworthy that this piece of legislation addressed two very prominent criticisms of Ed R & D of the day: that it was overly fragmented and not concerned enough with basic research. At least the legislation as written offered the promise of remedying both problems and restoring confidence in Ed R & D. The "creation of NIE reaffirmed an important principle: educational R & D was important for the federal government" (Dershimer, 1976, p. 130).

However, any initial optimism was quickly dashed. As if a replay of the regional educational lab experience, NIE's beginnings were calamitous. In an extremely short period of time, the new agency was under fire. The U. S. Senate was threatening to cut off funds, and appropriations were decreased. School communities objected that money that could go into service programs might be diverted into basic research with no immediate

pay-offs (Wise, 1976, p. 64). These and other tensions created an uncertain environment for NIE, and hence for Ed R & D, of which NIE was a symbol.

In the four years following the creation of NIE, two further enactments at the federal level directly addressed Ed R & D. In the 1974 Educational Amendments (P. L. 93-380), NIE was specifically directed to evaluate federal compensatory programs, with which some members of Congress were becoming increasingly disappointed. It seemed that dissatisfaction with previous evaluations of these programs led to this request for new data upon which to base legislative changes (Passow, 1977, p. 8). At the same time, the Educational Amendments of 1974 also established a National Center for Education Statistics, housed in the Office of the Assistant Secretary of Education. From the U.S.O.E. was transferred responsibility for collection and dissemination of educational statistics.

By means of the Educational Amendments of 1976, Congress gave further direction to NIE. Four areas were specifically spelled out as needing the agency's concentration: education in basic skills, finance and management of educational institutions, the relationship between education and work, and the dissemination and use of new knowledge. Also, the same Educational Amendments ordered that a panel be formed to review the operations of both NIE and the labs and centers. Increasingly, it was obvious that the federal legislative body was closely scrutinizing Ed R & D and placing constraints upon the breadth of its operations.

The above constitutes a brief overview of the main federal laws directly addressing Ed R & D. Since the 1960s, however, there have also been laws passed primarily directed at the protection of the rights of individuals vis-a-vis the federal government and only indirectly, though

not insignificantly, concerned with the field of educational R & D. This body of legislation involves six areas other than those named previously: request for data related to individuals' rights, disclosure provisions, protection of participants from research risks, access to school records, research clearances, and individual privacy.

In 1964, the U. S. Civil Rights Act was passed. Section 402 of that law provided for a study regarding the lack of equal educational opportunity because of race, color, religion, or national origin in American educational institutions. Known as the Educational Opportunity Survey, this study was notable for its sophistication and the influence it had on later researchers, especially in the area of providing equality of educational opportunity for the disadvantaged.

The Freedom of Information Act of 1966 (Amended in 1974) dealt with another set of rights -- those of access to information. It firmly established the principle of disclosure for the federal government. Since this law emphasized the release of information to the greatest possible extent, its potential impact upon educational R & D is considerable.

Whereas the above act protects citizens' rights of access, the 1974 National Research Act was aimed at protecting research participants from potential risks related to a research study. This act provided for the establishment of institutional review boards to determine whether research risks exist for participants in a study and whether the risks are worth the potential benefit to be derived from the study. According to the provisions of this law, any institution receiving support from the Department of Health, Education, and Welfare must have a board review all

projects in order to protect the research subjects. Principles of voluntary consent, limited disclosure of information about the participants, and freedom to withdraw from the study were emphasized (see Weinberger and Michael, 1977, pp. 3-4).

A third individual rights law, one focused on the educational realm, is the Family Educational Rights and Privileges Amendment (Sec. 438 of the Educational Amendment of 1974). Popularly known as the Buckly Amendment, this law recognized the rights of parents to inspect school records regarding their child and to challenge the contents of those records. In conjunction with this right of parental access was provision for limited disclosure of the contents of student records, so that data in school records cannot be viewed by an unauthorized third party without the written consent of the child's parents. Since school records data are so frequently used in Ed R & D, the possible consequences of this law are significant.

In the same year, the Federal Reports Act was passed. Its aim was to limit the burden of response on citizens requested to provide information to the federal government. The responsibility was given to the Bureau of the Budget (more recently, the Office of Management and Budget) to review data collection instruments for ten or more persons and to authorize clearance for use of such instruments. In an historical context, this act originated in a climate of concern about the excessive burden and costs of paperwork in the federal government (see Carter, 1977, pp.7-8). Such concern, however, can have an obvious limiting effect on the quantity and perhaps even the quality, of educational research.

Finally, the 1974 Privacy Act (P.L. 93-579) placed limits upon the use of data that can be attributed to identifiable individuals. This act

mandated that individuals have access to data concerning them and that such data will not be used (without the individual's consent) for purposes other than those for which the information was obtained. Furthermore, the new law set up a Privacy Protection Study Commission to study data systems and to make recommendations to Congress. Safeguards for keeping data accurate and secure were also prescribed.

In summary, the purpose of this section was to provide a sketchy overview of the major pieces of federal legislation that influence Ed R & D either directly or indirectly. Necessarily, many historical relationships were left out, but even so certain patterns emerged. It is clear that federal involvement in Ed R & D has intensified over the years, and to some extent so has federal control. Similarly, it is obvious that historically the federal government—Ed R & D relationship has at times been stormy and controversial. But what is perhaps most striking is the number of disjointed federal laws governing different aspects of Ed R & D. It is to be expected then that such varied laws would have a complex web of effects upon the whole gamut of Ed R & D. The purpose of the next section is to unravel some of the complexity and to gauge impact.

The Impact on Ed R & D

Introduction

The attempt to identify specific impacts of federal legislation upon almost anything is virtually doomed from the start. Some of the difficulty of such an attempt is due to the nature of American federalism and its relationship with the private sector. Sharkansky explained the problem most graphically:

> Because of the public-private marble cake, it is virtually impossible to obtain measures of public services that are solely the outputs of particular governments. (1970, p.116)

Moreover, this "marble cake" of local-state-national governments and private enterprise is embedded in an myriad of social, economic, cultural, and political forces, a reality that further confounds any attempts at assigning specific impacts to definite pieces of federal legislation. Undoubtedly, any possible impact is a function of many forces, not just legislation. And these other forces are probably much more powerful than any isolated federal initiative. And since many federal laws are intentionally vague in order to satisfy competing political views, any attempt to relate some measure of result from the legislation's "objectives" is made all the more difficult.

In spite of the uncertainties involved in linking federal legislation with its impact, an attempt must be made. Federal involvement in Ed R & D comprises too much money, too many separate energies, and too many expectations not to investigate it. True, empirical evidence of impact is scanty. But political systems theory, as pointed out in Section Two of this paper, helps to provide foci for analysis.

And there are ample historical data and literature in the field to allow for some tentative conclusions.

Based on these sources, then, this section explores impacts that reasonably appear to be linked to federal legislation. This exploration occurs in two steps. First, specific pieces of federal legislation are discussed. Then, the overall impact of federal legislation is treated more generally. Throughout, emphasis is placed not only on actual impacts that might have occurred, but also on potential impacts that could occur given the nature of federal legislation.

Before examining specific laws, it would be worthwhile to review what was stated earlier regarding "federal legislation" and "impact." The concept of "federal legislation" includes not only the actual law as enacted but also the way in which the law is administered and interpreted. The term "impact" includes immediate impact in terms of level of service or change in existing practices, but also the outcome or consequences of these changes and any response made by the population affected. These concepts need to be kept in mind throughout this analysis because they constitute a frame of reference for making judgments about the phenomena in question.

The Impact of Specific Laws

The immediate impact of the federal law creating the Department of Education and charging it with statistical accounting and dissemination functions was the initiation of federal services for conducting surveys, compiling data, and disseminating the information. As the activities were re-funded, the level of services grew over the years though largely in the confines of the original charge. The outcomes of this legislation are interesting. A relatively narrow concept of research

(i.e., statistical accounting and information dissemination) lingered over the years. And since educational research was undergoing some conceptual development over the same period, a gap developed between federal involvement in Ed R & D and the theory of Ed R & D. At the same time, however, a mechanism (U.S.O.E.) was developed which could become an immediate conduit for federal Ed R & D activities as soon as enabling legislation would support them. And this legislation came in the 1950s.

The 1954 Cooperative Research Act, when it was finally funded, had the immediate impact of providing federal support for unsolicited research proposals, and the level of support grew each year with the success of the program. Since the projects were field initiated, researchers were able to work on problems important to them and still receive support. But the outcomes of such a policy included a continuation of the long-standing fragmentation of educational research efforts (Sieber, 1974, p. 478) and a reinforcement of a perceived gap between researcher and practitioner. The latter was the case since basic research (not development, dissemination, or adoption) was the chief beneficiary of funding (Guba and Clark, 1975, pp 6-7.). A response to this situation arose in the form of pressures to use Ed R & D more directly in the process of improving American schools (Dershimer, 1976, pp 55-57). In spite of the criticism, however, and in spite of the attempt to adopt a "big science" model with little modification (Holzner et al., 1977, p. 93), the Cooperative Research program did give great impetus to Ed R & D and helped shape the definition of educational research (Campbell et al., 1970, p. 31). Also, the Office of Education assumed a more substantive role in the realm of Ed R & D.

Other legislation in the 1950s and early 1960s most immediately increased federal support levels in specific content areas. Thus, appropriations for the National Institute of Mental Health and the National Science Foundation increased Ed R & D support levels, but only in given areas and not through the U.S.O.E. The National Defense Education Act of 1958 increased research support levels, but also only in limited areas: foreign languages and media. And the Vocational Education Act of 1963 provided substantial levels of funding for research in the area of vocational education, with the result that nine R & D centers were established (Clark, 1976, p. 6). Overall, Ed R & D activities related to federal support grew considerably. An additional outcome was the increase in fragmentation in the field, with several different agencies administering a number of different programs wit no real coordination.

The Elementary and Secondary Education Act of 1965 at one and the same time brought a measure of coordination to the field of Ed R & D and intensified the existing disjunction. The law most directly resulted in a sizeable increase in federal support for many different activities of Ed R & D, an enlargement of the scope of institutions that could participate in the support (e.g. private, profit-making research organizations), and a governmental focus for many research efforts: improvement of schools, especially for the disadvantaged. Whereas the third result moved in the direction of coordination, the first was so dispersed that fragmentation was intensified.

The increased federal support of ESEA was manifested in an initiation or at least expansion of several services. University-based training programs for educational researchers were instituted (over 100 would be supported). Provision of funds for construction of lab facilities led

to the establishment of regional educational laboratories, and research and development centers were also supported. Within two years, 20 labs and 10 centers were set up (Dershimer, 1972, p. 3). State education agencies were encouraged and supported to develop research capabilities. As a result, a number of education units related to research were added at state level (Halperin, 1975, p. 8). And because of the amendment mandating evaluation of programs for the disadvantaged, there was a large number of program evaluations initiated for Title I programs.

The outcomes of all these activities were as wide-range and diverse as the provisions of the legislation itself. First, there were personnel outcomes--many more people were brought into the field of Ed R & D. The researcher training programs, although not all of them successful, introduced many to the theories and methodologies of research, development, dissemination, and evaluation. The labs and centers did the same. The long-range effects of this personnel development and utilization upon the development of the field of Ed R & D is incalculable, but probably quite great. At the same time, some less salutary personnel outcomes have been evident. The huge amounts of money helped to encourage a "grantsmanship" culture, whereby opportunists and "consultants" were attracted, university personnel sometimes shifted to grants from other responsibilities, and school districts and universities deluged with grants specialists (Wayson, 1975, pp. 151-156). The effects upon the kinds and quality of program offered in these institutions and upon personnel hiring, promoting, and tenuring practices have been at least potentially enormous.

The outcomes of ESEA regarding systems for delivering Ed R & D services were just as extensive as those regarding personnel. One rather unexpected outcome was the establishment of the Educational Resources Information Center (ERIC). Although somewhat hastily implemented, ERIC

developed quickly into a very successful information/processing center. Services were decentralized (e.g. placed at universities) so that clearing house specialists could remain close to their institutions. Thus, even though researchers and practitioners have not been totally supportive of ERIC, still its decentralized nature and success at information dissemination have resulted in the formation of a constituency with vested interest in the system. Largely because of this constituency response, the funding for ERIC has grown year-to-year, (Dershimer, 1976, pp. 109-110).

Another system resulting from ESEA authorization and appropriations is the network of the Educational R & D Centers and the Regional Educational Laboratories. Some of the credit for the formation of this system would have to be given to the response that had come to earlier federal Ed R & D legislation (e.g. Cooperative Research Act). The earlier criticism, namely that research efforts were primarily a collection of fragmented, small-scale studies that were too much the domain of researchers out of touch with the field, served as input to the legislative process formulating ESEA. The lab and center network were intended to build communication channels between researchers and practitioners, as well as among researchers of different disciplines. In many cases, one outcome was increased communication at both levels, so that large-scale Ed R & D was possible (Holzner et al., 1977, p. 96). One rather unpleasant outcome, however, was the quite severe criticism of the network, especially of the labs, that arose shortly after they had become operational. In retrospect, some of the difficulty can be traced to the output dimension of the legislative process. Neither the legislative provision nor those administering them were unambiguous in the direction

given to the network. Lack of clarity of objectives, shifting priorities, and weakness of support had a deleterious effect (Dershimer, 1976, p. 3). The outcome was a network in which proposed distinctions between labs and centers became blurred, with the result that some labs and centers tried to deliver a range of services, instead of specific ones related to basic objectives. In several instances, the ultimate outcome was a surge in differing sets of expectations, disillusionment, and criticism (Dershimer, 1976, pp. 107-108). By the early 1970s, funds were being cut, funding that was provided had changed from institutional support to categorical purchase of services, and some labs and centers were being phased out.

> Indeed, educational research and development has become something of a pariah on the priority list of federal policymakers in education. (Halperin, 1975, p. 9)

Aside from personnel and delivery systems outcomes, ESEA also had consequences for the content of Ed R & D and, therefore, emphasis upon certain Ed R & D functions. Since one ESEA amendment mandated evaluations of programs for culturally-disadvantaged children, the evaluation function of Ed R & D was given support. And since "objective" evaluations were stressed, certain methodological developments were encouraged. It would be an overstatement to say that the evaluation and accountability movements were solely an outcome of federal legislation; yet, they were given great impetus. One unintended outcome of the evaluations of culturally-disadvantaged programs was Congressional dissatisfaction with the studies' results. This led to a request for further evaluations mandated by later legislation in the 1974 Educational Amendment (Passow, 1977, p. 8).

One other content area that ESEA stressed was that of improving schools. Congress was convinced that American schools, especially for disadvantaged students, needed to be improved and that Ed R & D could play a role in this. An immediate impact of such an emphasis was an increase in the number of studies directed at school improvement, and stress was placed upon certain R & D functions (such as applied research, evaluation, development, and dissemination) to the detriment of basic research. The eventual outcome was, of course, a downplaying of the basic research function. Yet another outcome was also inevitable. Since expectations at the time of ESEA were so high and the goal was school improvement, disillusionment was bound to set in. And it did, rather quickly. Ed R & D was not able to deliver any magic formulae for improving schools. Disenchantment with Ed R & D was a logical consequence, and it grew at the end of the 1960s and in the early 1970s.

Disillusionment was manifested in growing criticism of the U.S. Office of Education. Since one direct impact of federal Ed R & D legislation was the dramatic growth of U.S.O.E., it had become a complex bureaucracy by the late 1960s. And since the quality of the administration and interpretation of a law is a major determinant of the final output of the legislative process, the status of U.S.O.E. in the late 60's and early 70's was an important link in the output-input-outcome-response-feedback chain of federal Ed R & D legislation. Unfortunately, according to many observers, that link was weak. As pointed out earlier, mismanagement and organizational problems plagued the agency (Dershimer, 1976, p. 71; Cronbach and Suppes, 1969, pp. 248-9). In addition, there were other difficulties. For one, it did not occupy a very strong position in relation to the Bureau of the Budget (Office of Management and

Budget) or the Congress (Cronbach and Suppes, 1969, pp. 247-8). Second, U.S.O.E. seemed to change priorities almost continuously, so programs were never entirely certain of re-funding (Sieber, 1975, p. 4). Some of this instability was due to changes in leadership in the Office and in HEW, and some was due to the office's insecurity vis-a-vis Congress. Third, the Office itself was fragmented from within, the Bureau of Research sometimes setting itself apart from the other U.S.O.E. operations (see Dershimer, 1976, p. 85). And fourth, and perhaps at the root of many of the above problems, the U.S.O.E. bureaucracy had relatively poor ties with the Ed R & D community so that "by 1970 virtually the entire budget for educational R & D, with the exception of the small grants program, was spent on programs devised within the bureaucracy" (Dershimer and Iannaccone, 1973, p. 118). Thus isolated from Congressional and professional leaders, the U.S.O.E. was without essential input and feedback linkages to help integrate it into the entire set of input-process-output-outcome-feedback relationships. This lack of integration had an impact of its own, leading to pressures to move Ed R & D from the Office into a new agency.

Criticism regarding U.S.O.E., reactions against the fragmentation of Ed R & D, and dissatisfaction with Ed R & D's apparent inability to generate findings or develop products that could improve schools, all constituted feedback in relation to earlier federal laws and input into new legislation. The output of the new legislation (P.L. 93-380, Title III) was the mandate to reorganize federal R & D services. The immediate impact was the creation of the National Institute of Education and the transference from other agencies (notably U.S.O.E.) of many Ed R & D activities into the new Institute.

Yet, as Wise (1976, pp. 62-65) so graphically described, the creation of NIE only led to immediate controversy. Other components of the output of the law creating NIE included mandates for NIE to help solve education's problems, to advance the practice of education, to strengthen the scientific and technological foundations of education, and to build an effective Ed R & D system. Thus, "the institute was to be dedicated to the improvement of education primarily through research" (Wise, 1976, p. 63). The immediate impact was that NIE prepared to concentrate more on research, necessitating a shift from some present projects in development, demonstration, and dissemination. That potential shift from present programs meant an outcome of reduced services for many, including school communities and existing project personnel and clients. The subsequent response was an uproar, providing some very negative feedback to Washington. Moreover, the law creating NIE had also the impact of moving many discretionary funds from U.S.O.E. to NIE. The response to this change was additional pressure that NIE fund programs most popular with strong interest groups, especially school communities that wanted development and dissemination funds, not research funds more amenable to university processes. The feedback to Congress was intense, and one Senate Committee issued a report severely criticizing NIE and urging it to concentrate on certain more applied areas (Stivers, 1974, p. 15).

These and other pressures ultimately led to a decrease in NIE funding and Congressional threats to its very existence. Under such threats, NIE's response was to accede to the demands of Congress and special interest groups. As Wise explained;

> It began to appear that for the NIE to survive it had to become accustomed to the political mode of decision making which requires that funds be distributed predictably, and in accordance with representation and

> political power. The inheritances and their constituencies began to require an accommodation in the scientific view of the NIE's mission. As it became clear that the development and demonstration projects were going to dominate the budget, the NIE began to develop a view of its mission consistent with this reality. (Wise, 1976, pp. 63-64).

As a result, NIE became more secure in its relationship with Congress and the interest groups, though at some price.

> It [NIE] has been tamed by the very forces from which it was to be freed. Stability has been purchased by accommodating the original research mission to the demands of bureaucratic Washington and the desires of certain interest groups. Having satisfied these relevant demands and desires, the agency now appears to have congressional support. (Wise, 1976, p. 62)

In the case of NIE, therefore, even though the actual legislation (and even prior Congressional deliberation, see Wise, 1976, p. 63) implied strong support for basic research, the feedback to the potential impact of that emphasis eventually resulted in changing the intent of the original law. In this way, Congress continued to exercise a directive hand long after the law was enacted.

Increased direction from Congress was the output of subsequent legislation also. The 1972 Educational Amendments had the immediate impact of increasing NIE's level of evaluation of compensatory programs. The outcome of such a change was the deepening of NIE's commitment to more applied studies directly in the service of Congressional intent to make changes in legislation authorizing compensatory programs. And the 1976 Educational Amendments indicated even more extensive Congressional direction for NIE. The impact of that legislation included the shifting of more resources within NIE to certain priority areas. One outcome of such a shift would certainly be the lessening of support for other non-priority areas. In addition, the same legislation's mandate that the

R & D centers and the regional labs be investigated resulted in the formation of a review panel, whose recent recommendations directed the labs and centers to "clarify their mission in terms of the major evaluation needs of the country" (Education Daily, January 11, 1978, p. 1). Ultimately, the impact of this panel's work might well be to deepen NIE's commitment to more applied studies in the service of Congressional objectives for education.

So far, discussion has revolved about federal legislation's impact on Ed R & D regarding levels of support, organization of Ed R & D services, areas and functions those services should emphasize, and the like. That influence has been found to be considerable. Yet, as was stated earlier, federal legislation regarding certain individual rights also has affected Ed R & D. And that influence has been, or at least potentially can be, considerable.

The primary purposes of the laws involved were the recognition of individual rights in the areas of civil rights, disclosure of government information, the protection of research participants from risks, access to and privacy of student records, research instrument clearance to avoid overburdening respondents, and privacy of personally-identifiable data. Each of these laws, while not concerned specifically with Ed R & D, had provisions that had some degree of fall-out for the field.

The immediate impact of the Civil Rights Act of 1964, Sec. 402, was the undertaking of the Equal Opportunity Survey. The outcome of this mandate was quite significant, for the results of the survey, though complex and open to interpretation, affected other studies of educational opportunity and ultimately provided input to federal legislation for the disadvantaged (Dershimer, 1976, pp. 114-116).

The influence of legislation regarding disclosure of information, privacy, and access to information has similarly been far-reaching.

> The scope of individual privacy and information legislation is quite broad, impacting the administration of research, funding procedures, and the very substance and techniques of research. The legislation affects sampling, instrumentation, research design, data processing, data dissemination, and the retention of data. In short, the entire life cycle of a research project has become subject to federal structures. (Weinberger and Michael, 1976, p. 3)

More specifically, The Freedom of Information Act had the immediate impact of opening up large quantities of data held by the federal government. In terms of access for educational researchers, many different kinds and greater amounts of information have become available for all kinds of studies. One outcome might be a renewed interest in studies related to such data and in replications of previous studies based on government data which had earlier been denied access to most researchers. However, at least one potential side effect might be undesirable. As federally-sponsored research becomes open to more scrutiny, this could have an impact of breaching research confidentiality (e.g. the name of a school involved in a study), with the outcome of decreasing future levels of cooperation and willingness to take part in studies.

The immediate impact of the 1974 National Research Act was the increase in institutional reviews of research involving human subjects. One outcome of such procedures has been an up-swing in the amount of paper work and clearance screening that a researcher must face before embarking on a study. Also, emphasis upon getting voluntary consent (including that of parents if children are involved) and attention to freedom of participant withdrawal conceivably could hinder sampling

procedures and control-experimental group comparisons, though traditionally such restrictions have long existed, if only in the form of self-regulation. Finally, one ultimate outcome to these requirements just might be (and evidence exists that this already has happened) a greater sensitivity on the part of the Ed R & D community regarding the whole matter of protection of human subjects and innovative ways of preserving both experimental integrity and the basic human rights of subjects.

Sensitivity in another area has been the legacy of the Buckley Amendment. The impact of the law has certainly been felt in the entire domain of access to school records. Since parents have the right to review and challenge the contents of their child's records, predictable outcomes have been the increased efforts by school officials to maintain the accuracy of records, while at the same time being hesitant to put certain things into them. The gains and losses as far as content for researchers to examine is probably mixed and incalculable. However, one very confining impact of this law is the clear realization that researchers do not have the right to demand the release of school records data (Weinberger and Michael, 1976, p. 4), so access has become a problem in some cases. This is especially true since officials, perhaps not entirely understanding the law, have in many cases grown very hesitant to open up records for research purposes lest they somehow violate the law's intent. Also, the law has long-range effects upon research procedures since the purposes of studies must be made known (making the masking of the intent of a study more difficult at times) and since personal identifiers must be removed from data when no longer needed for the study (limiting follow up studies somewhat). Moreover, because of a general

lack of familiarity with the law's provisions among educational personnel, a climate of uncertainty and hesitancy in the face of any request for school records data has been an outcome of the legislation, with a resulting hampering of research endeavors. Also, the impact of this law upon validation and reliability checks and upon sample selection appears to have been more than minor (Weinberger and Michael, 1976, pp. 5-6).

In the instance of the Federal Reports Act of 1974, Carter's (1977, pp. 7-12) case study vividly illustrated the impact of this law upon an individual researcher's activities. The law's immediate impact was the establishment of processes for federal clearance of instruments in order to minimize burdens placed upon respondents and costs. As Carter made evident, the main outcome for the researcher and the federal government is that the procedures developed to implement the law consume too much time, are costly, are unproductive, and can be remedied without changing existing statutes. Ultimately, the effects of inconvenience and uncertainty for researchers could easily deter many from seeking additional federal support for a project if they must constantly undergo perceived harassment.

And lastly, the Privacy Act of 1974 appears to have some impact upon Ed R & D, even though many of its provisions have only codified what had been prevailing practice (Weinberg and Michael, 1977, p. 7). Much of what was said about the Buckley Amendment could be reiterated here, since privacy and access are the issues. The Privacy Act has two additional dimensions that have implications for Ed R & D. First, the federal government must take reasonable precautions (including training of personnel and setting up operating rules) to insure the accuracy and security

of records. An outcome of such a practice could well be increased reliability of data and larger amounts of red-tape to gain access to such information. Second, since officials can be liable to civil suit for deliberate violation, extreme hesitancy to cooperate with requests for data, and consequently more limited data access, could be additional outcomes in many cases.

There is no doubt, therefore, that the legislation regarding individual rights has placed many restrictions upon almost every aspect of educational research activity. But it would be wrong to paint an entirely gloomy picture. Given the nature of the obstacles involved and the rights that need protection, some more positive outcomes have included, and will probably continue to include, the following:

(1) "Deliberate attention to matters of freedom of information and personal privacy are now permanent obligatory public as well as professional aspects of the life of every educational researcher..." (Schutz, 1975, p. 6)

(2) "They have quickly stimulated a new look at peer-review traditions, participation consent, and facets of research reporting." (Schutz, 1975, p. 6)

(3) "Privacy legislation seems to be spurning new statistical and methodological developments, their rapid diffusion and adoption." (Weinberger and Michael, 1977, p. 8)

Impact of Federal Legislation Generally

The previous section of this paper addressed the question of impact of specific pieces of legislation. This section turns to the question: What has been the general impact of federal legislation upon Ed R & D? The attempt here is to identify patterns of federal impact common to more than one specific instance.

What is perhaps most striking about federal legislation regarding Ed R & D is the enormous size of its financial support for Ed R & D activities. Mason and Nelson (1977, p. 15) estimated that in excess of $513 million was obligated in fiscal year 1975. This means that a great number of Ed R & D activities were carried out in that year solely because of federal government support. That in itself is no minor impact. In 1969, a committee of the organization for Economic Cooperation and Development remarked on just this fact:

> Our first conclusion is that American society has mounted an impressively large effort in educational research and development in a remarkably short period of time. Only, perhaps, in the U.S.A. would that effort be regarded as both trivially small and highly controversial. (Dershimer, 1976, p. 119)

And since the federal government funds a large proportion of all Ed R & D activity (Sieber, 1974, pp. 480-1), what the O.E.C.D. observed was largely an impact of federal legislative involvement. Moreover, federal legislation has also had a related impact: the suport has been established in such a broad fashion that large-scale Ed R & D projects have become possible and American society has been able to provide "something more than an individual by individual R & D effort in education" (Schutz,1974, p. 3).

But the federal support did not come without strings attached. Accompanying increased federal money and involvement has been increasing federal control, a major impact of the federal legislation. Restrictions have been mandated for many phases of research studies (e.g. data gathering, choice of instruments, sampling). Emphasis has been placed at different times upon certain functions (e.g. development, demonstration), often to the detriment of other functions. Certain specific topics (e.g.

basic skills development and school finance systems) have been required of federal agencies, notably the N.I.E. And overall, Ed R & D has been made an instrument in the service of a larger objective, the improvement of schools, which is but a strategy in a larger social plan: the establishment of equal opportunity in all areas of society (Berry, 1977 , p. 4; Miller and Matthews, 1977, p. 16). Conceived in these ways, the federal legislative initiative in Ed R & D has had a strong categorical dimension, one that has greatly determined directions in which Ed R & D can develop.

One example of this influence over Ed R & D development was supplied by Guba and Clark (1975, p. 6). In their view, federal legislative policy has greatly contributed to the formation and continued existence of a unified-systems view of Ed R & D. According to their definition,

> This perspective, a unified-systems view, presupposes and/or attempts to effect a linked set of productive agents and agencies each of which assumes discrete responsibility for a segment of Research-Development-Diffusion-Adoption effort to achieve a commonly agreed upon goal of ultimate KPU productivity. (p. 6)

Such a linear approach to Ed R & D has had its own secondary impact. It has raised unachievable aspirations which ultimately result in disillusionment in Ed R & D. Furthermore, frequent changes in policy and program directions have resulted, leading to a further fragmentation of an already fragmented field.

The observations of Kerlinger (1977, pp 5-12) lead to a similarly discouraging assessment of federal legislation's influence upon Ed R & D. According to Kerlinger, federal policy was based on, and helped reinforce, two false ways of looking at Ed R & D: the pragmatic-practical fallacy and the demand for relevance. The first is concerned with Ed R & D as a

means of solving educational problems and improving schools. This is an unrealistic approach, he said, because the nature of research makes it impossible to say that a specific result will ensue. There is rarely a direct payoff from research. The second approach emphasizes that Ed R & D be directed to social and educational problems that are "worthwhile." Once again, this is fallacious because the nature of research is that no one can say that any research is going to have worthwhile results, not if the researcher is attempting to be objective and disinterested. Yet, Kerlinger argued, the ultimate impact of these points of view has weakened basic research in education and diminished support for Ed R & D. And, since federal legislation has openly advocated both of these points of view, it seems reasonable to assume that it has given them legitimacy and further weakened Ed R & D in the manner described by Kerlinger.

These three major impacts of federal legislation (i.e. financial support, federal control, and influence over major Ed R & D pardigms) have been accompanied by a number of more specific impacts. For the sake of brevity, and because many of the ideas have been expressed elsewhere in this paper, these other impacts are addressed quite tersely.

(1) Federal legislation has resulted in the collection of a vast amount of statistical data. The very existence of such data has triggered analysis of them and has aided our understanding not only of educational phenomena but also of the nature and extent of Ed R & D activity.

(2) Federal legislation, especially with its money for researcher training, has encouraged many people into the field of Ed R & D. Moreover, the availability of grants has provided motivation for the growth of the number of educational consultants, evaluation specialists, and masters of grantmanship (Kirst, 1974, p. 469). In addition, many

non-educators have been brought into the field of education through federal incentive.

(3) Unfortunately, because of the amounts of money made available from federal legislation, opportunists have entered the field of grant competition. Moreover, many school district and university resources have been directed toward grant priorities and away from priorities more in line with their basic missions. And at times, federal funds have been used for other than lawful purposes by school and university officials. These three occurrences, which Wayson associated with "grantsmanship ethics" (1975, pp 151-156), have dissillusioned some participants and observers.

(4) Inevitably, federal legislation has the circular effect of leading to requests for additional federal funding. As federal dollars have become available, constituencies have developed. These constituencies have quite naturally looked for continued and even increased support for existing programs.

(5) Because of increasing federal control over certain aspects of Ed R & D (e.g. problem selection, research function, etc.) and because of some aspects of grantsmanship ethics (mentioned above), some very good researchers have left the realm of federal grants to pursue their research interests in a less restrictive atmosphere, though without the advantages of funding support (Sieber, 1974, p. 485; Krathwohl, 1977, p. 9).

(6) In most instances federal legislation has had the ultimate impact of a further proliferation of laws and regulations (Schutz, 1977, p. 1). Pressure develops for re-funding of existing programs. Priorities and purposes need to be clarified. Aspects of program need to be regulated.

(7) In spite of the attempts to unify Ed R & D in one agency, federal legislation to-date has tended to reinforce fragmentation of Ed R & D. In 1975, for example, Ed R & D spending at the federal level was dispersed among six departments, seven agencies, and fifty-six programs. And in that year, N.I.E. housed only 14% of this funding, while U.S.O.E. had 52% (Mason and Nelson, 1977, pp. 14-15).

(8) Just as federal funding has stimulated political action on the part of the poor and minorities (Kirst, 1974, p. 471), so too federal legislation has had an impact upon members of the Ed R & D community. Competition for scarce federal dollars, fears of loss of existing levels of support for certain programs, and alarm at restrictions imposed by federal laws have brought many researchers to the realization that political action is a necessity in order to influence legislative output.

(9) Federal overemphasis upon certain functions of research (e.g. development and dissemination) have down-played others (notably, basic research). This has led to increased specialization, since certain functions are separated from others, and to a greater gap between researchers and practitioners. The latter is largely due to researcher preference for certain functions and practitioner preference for certain others, and the competition that results from trying to get the federal government to legislate in one direction or another. The regretable outcomes are more field services without theoretical bases and theories without grounding in field-based realities.

(10) Educational evaluation and the accountability movement have been given great impetus by federal legislation.

(11) Federal legislation has helped spur development in the field of Ed R & D. As Krathwohl pointed out, since 1954 Ed R & D has seen improvement such as: more sophisticated methods, larger pool of competent

personnel, increased ability to conduct large-scale studies, growth in research capacities of universities, and larger numbers of administrators with research credentials (1977, p. 8). These developments have been influenced either directly or indirectly by the impact federal legislation.

In brief, federal legislation has had an impact upon every dimension of Ed R & D. Although it would be incorrect to attribute every development and change in Ed R & D to federal influence, it would be a greater error to discount that influence. Because of the enormity of federal support and the specifics of federal legislation. Ed R & D, perhaps more than any other dimension of education, has been shaped by federal legislation.

Conclusions

The basic purpose of this paper has been to provide an "overview." This has by definition meant an emphasis upon breadth rather than depth. Even this summary examination has revealed some basic observations that can be made regarding the entire relationship involving federal legislation. By way of a concluding statement, these observations are discussed in three stages: one overriding statement about federal legislation's impact upon Ed R & D, some select issues that need attention, and a few implications.

The most telling statement that can be made about federal legislation's impact upon Ed R & D is that it has been both extensive and intensive. Every aspect of Ed R & D has been affected: personnel preparation and selection; interrelationships among different individual participants, as well as among politicians, bureaucrats, researchers, and practitioners; the actual conducting of R & D studies, from problem selection and definition to methodology to reporting of results; and even

the levels of response from participants to the political system. At the same time, in addition to this widespread influence, the impact has been felt intensely, insofar as marked changes have occurred in levels of activity, as well as in attitudes and even research paradigms.

Given this extensive and intensive nature, it is to be expected that a number of issues have arisen as federal legislation has had its impact. And this has been the case. A number have been raised throughout this paper; it would be worthwhile to review several of the more significant.

First, one recurring point of contention has been the lack of balance exhibited among the various functions of Ed R & D. Criticism was heard that too much emphasis was placed on basic research, or development, or dissemination, or evaluation at different times in the history of federal involvement in Ed R & D. Moveover, the perception of imbalance was aggrevated by a tendency of federal legislation and federal officials to shift emphases almost constantly from one function to another. Thus the question of what constitutes a balance among various functions also includes the notion of stability of priorities.

A second issue evident in the relationship between federal legislation and Ed R & D is the apparent practitioner-researcher gap. Since different interests are involved, there always has been and will continue to be a certain level of divergence of purpose, style, etc. However, what is at issue is whether federal legislation and implementation tend to bridge this gap or widen it.

Third, the amount of fragmentation in Ed R & D has been contested. The consensus of observers is that fragmentation has been increased more than decreased by federal legislation initiative. Whether this is a deliberate policy direction, or (as is more likely) a result of the

compromise inherent in any federal legislative initiative, the question of fragmentation has been a continuous one, in spite of the rhetoric surrounding the formation NIE and its charge to build a "system" of Ed R & D.

Also probably a function of the compromise nature of federal legislation is a fourth issue: the concern for immediacy. How immediate should be the effects of Ed R & D activity? Federal legislation has tended to emphasize the immediate, with resulting pressures on Ed R & D to come up with quick solutions to existing educational problems. As has been pointed out, the logical conclusion of such effort is the over-emphasis upon certain Ed R & D functions, much to the detriment of long-range, basic research. The problems of balancing immediate and long-range, problem solving with knowledge discovery, and the practical with the theoretical continue to be in dispute.

A fifth issue, the demand that exists for Ed R & D, has rarely been addressed directly, yet is behind much of the relationship between federal legislation and Ed R & D. Historically, concern of participants has been upon the supply of Ed R & D services, yet no real data, and little substantive federal discussion, shed light upon the matter of supply (Mason and Nelson, 1977, p. 16; Sieber, 1975, p. 4). Nevertheless, it is obvious that demand for Ed R & D is clearly an issue that is basic to most decisions about impact.

A sixth concern has been the nature of the administration of federal legislation. As was discussed above, the output of the federal legislative process is affected by the nature of the implementation and administration of the law. In fact, Dershimer (1976, Chaps 1 and 2) claimed that the breakdown of the relationship between bureaucrats and the Ed R &

D community resulted in a situation in which bureaucrats were making priority decisions without adequate input from leaders of that community. Consequently, a continual topic of debate has been the ways in which any new law will be administered and who will be responsible for it. The criticism of both U.S.O.E. and NIE are indicative of the debate surrounding this issue. Ultimately, of course the impact of any law depends upon the established mechanism for implementation.

This leads logically to the final issue to be discussed here: the context in which impact occurs. The history of federal involvement in Ed R & D underscores the proposition that the final impact of any piece of legislation is shaped by the entire social-political context in which that impact occurs. The experience of the sixties offered evidence of this when Ed R & D was enlisted in the service of wide-range social objectives. As soon as this occurred, Ed R & D was embedded in networks of social and political networks whose powerful forces shaped the outcome of any relationships. Recognition of such interactions and attention to them remains a basic consideration of study of federal impact.

These represent only a few of the more salient issues that have occurred and promise to recur in the relationship between federal legislation and Ed R & D. The assumption made here is that these issues must be identified and recognized before the full notion of impact can be understood. For it is the controversy surrounding these issues that has helped to shape federal legislation at the input, conversion, output, and impact stages.

Given these issues, and the entire preceding analysis, some implications can be drawn for participants in the arena of federal involvement in Ed R & D:

(1) The relationship between federal legislation and Ed R & D is essentially a political one. Political processes are involved, competing interests vie for power and influence, constituencies are built, and valuable resources are allocated (see Englert et al., 1977, pp. 430-1). Because of this political dimension, political action is essential for participants, especially researchers. As long as Ed R & D depends upon federal financial support, it is going to be controlled to some extent by federal officials. If the Ed R & D community is to exercise leadership over the destiny of Ed R & D activities, then some form of political action is necessary. Denouncing federal control does not seem to be a viable alternative, because control of some kind is inevitably tied with funding. However, constituency and consensus building, political power, relationships with politicians and bureaucrats, and compromise are legitimate means of influencing both output and impact in our representative form of government.

(2) Congressmen, federal bureaucrats, educational practitioners, and the general public need to be educated about the realities of educational research. This means that a coordinated "public relations" campaign is needed to off-set mistaken notions about educational research, such as that Ed R & D can provide immediate solutions to long-term educational problems. Inherent in such a campaign is the realization that researchers should not place themselves in the position of making promises of delivering something that they cannot (Kerlinger, 1977, pp. 10-11).

(3) All participants need to recognize that federal impact is going to be considerable, and to some extent uncontrollable, as long as federal funds make up a large proportion of all funds spent to support Ed R & D. One possible way out of this situation would be a greater assumption of

financial support by state, local, institutional, individual, professional, and private sources. The rationale behind such a change would be that all of these other levels of Ed R & D effort have a responsibility in this arena that should be reflected somehow in funding.

(4) As Sieber mentioned, the entire field of Ed R & D is in need of a balanced, continuous, and integrated federal legislative approach (1975, pp. 4-6). There has to be a balance among many different elements: the functions of Ed R & D; the kinds of participants involved; the various settings possible; supply and demand; and different decision makers. At the same time, these various elements need to be integrated into one comprehensive system, which ideally has continuity in terms of policies, priorities, tasks, content areas, personnel, and organizational arrangements. Insofar as federal legislation aims at these three ideals, the impact upon Ed R & D is likely to be comprehensive and beneficial to the long-term requirements of both education and educational research.

(5) In effecting such a balanced, integrated system, special attention must be paid to the ever-present dangers of polarization between researchers and practitioners and between researchers and research participants. In the former instance, different goals and different strategies underlie different frames of reference. Federal legislation with its competition for funds has only heightened long-standing conflicts between practitioners and researchers. Attempts must be made to bridge existing gaps and to provide added incentives for collaborative undertakings. Similarly, emphasis must be placed upon the researcher-research participant relationship. Since research participants are hardly a naturally-forming constituency with common traits or goals, it is incumbent upon the research community to take the initiative in maintaining

the quality of the relationship. There is especial need for disciplined inquiry into the ways in which research impinges upon the rights of others and strategies for lessening any infringements (Michael and Weinberger, 1977, p. 18). Such investigations could well focus on new methodologies that respect the principles of research without trampling on individuals' rights.

(6) One implication of this paper is the applicability of political systems theory to the examination of the relationships between federal legislation and Ed R & D. Since political phenomena are in question and since the output-impact relationship is paramount, the political system model has provided both specific foci and expected relationships. Further application of this model might emphasize characteristics of the input and conversion stages that are idiosyncratic to the Ed R & D realm and ways in which the Ed R & D community can influence those characteristics to produce desired outcomes.

(7) One final word should be said about the educational outcomes of Ed R & D, the concern with which this paper began. Since federal legislation has such an extensive and intensive impact upon Ed R & D, the question about the impact of Ed R & D upon education takes on a new dimension. The issue now becomes the impact of Ed R & D within the context of certain kinds of federal legislative policies. Since Ed R & D is not a monolith but rather has some relationship to variation in federal legislation, the apparent lack of impact of Ed R & D may be more an indictment of federal policies than of the potentialities of a well-conceived and strongly-supported Ed R & D program. This is said not to remove all semblance of accountability from the Ed R & D community. Quite the contrary, the challenge becomes greater because the onus is on this community, especially its leaders, to demonstrate leadership in

developing and implementing federal legislation with the desired impact. Ultimately, as was stated earlier, this means having the expertise to develop sound, long-term objectives and strategies, especially political ones, for attaining them.

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FIGURE 1:

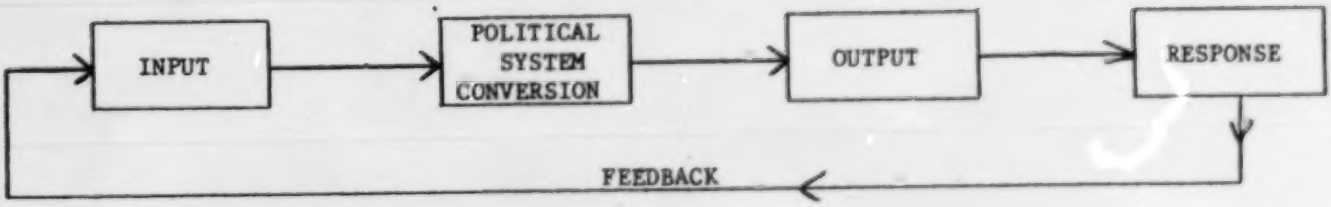


FIGURE 2:

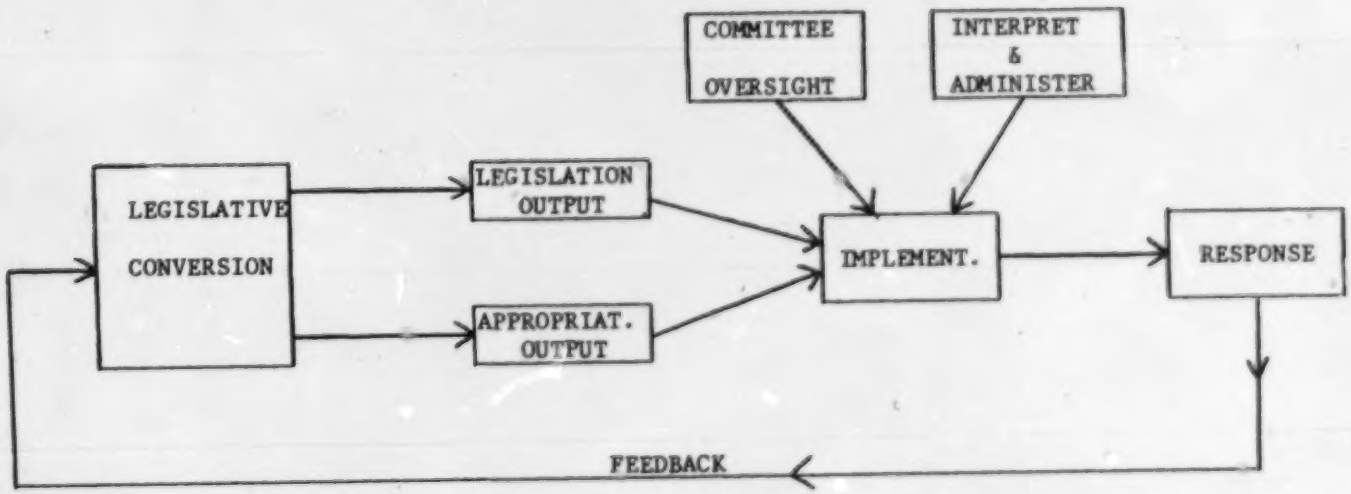
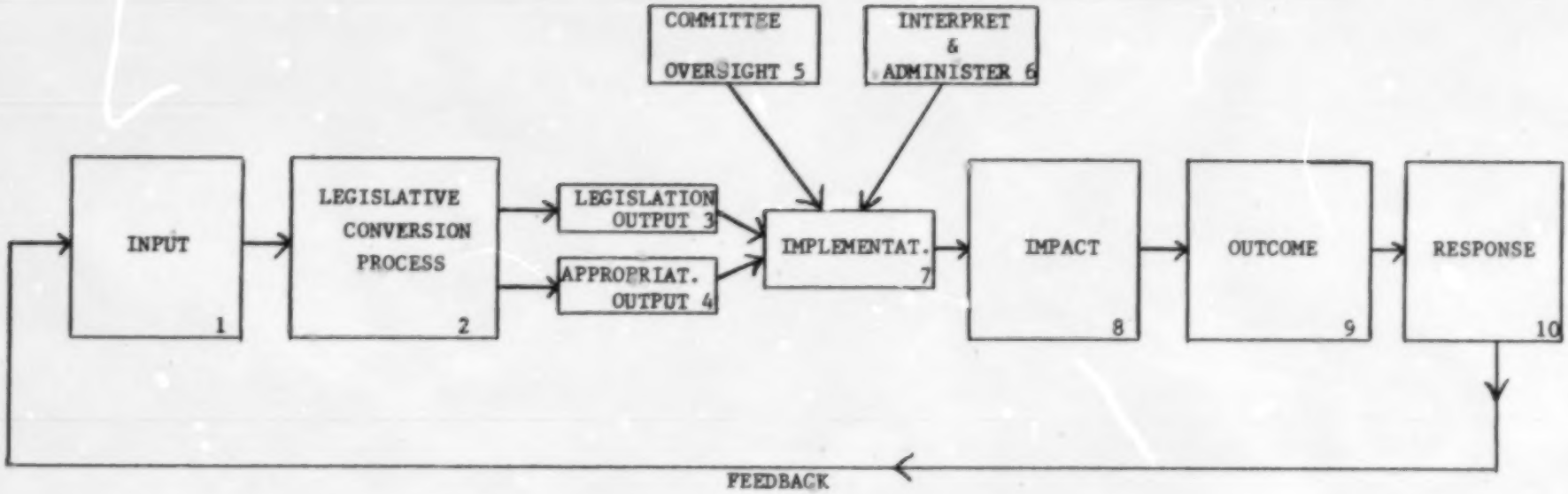


FIGURE 3:


COMMITTEE
OVERSIGHT 5
INTERPRET
&
ADMINISTER 6
INPUT
1
LEGISLATIVE
CONVERSION
PROCESS
2
LEGISLATION
OUTPUT 3
APPROPRIAT.
OUTPUT 4
IMPLEMENTAT.
7
IMPACT
8
OUTCOME
9
RESPONSE
10
FEEDBACK